AMENDMENT TO THE CLAIMS:

Please cancel Claims 10, 12 and 13 without prejudice.

- 1. (Currently Amended) A neurostimulating lead comprising:
 - (a) a body member having a length, a wall, a proximal end and a distal end;
- (b) at least one conductor embedded within the wall of the said body member and extending the length of the body member;
- (c) at least one tunnel extending from an outer surface of the body member to the at least one conductor at least one of said conductors;
- (d) at least one thin film electrode deposited on the said outer surface at the distal end of the said body member; and
- (e) <u>an electroplated conductive link conductive links</u> extending through <u>the at least</u> one tunnel said tunnel from <u>the at least one conductor to the at least one thin film electrode at least one of said conductor to at least one of said thin film electrodes.</u>
- 2. (Currently Amended) The neurostimulating lead, as in Claim 1, further comprising at least one connector having a contact contacts electrically joined to the at least one conductor conductors at the proximal end of the body member and adapted to connect the lead to a neurostimulator.



ATTORNEY DOCKET No. ANSI01-00012 U.S. SERIAL No. 09/500,213 PATENT

- 3. (Currently Amended) The neurostimulating lead, as in Claim 1, wherein the body member is tubular, having an annular wall defining an internal lumen extending between the proximal end and the distal end with the at least one conductor said conductors being spiral wound and embedded in the annular wall.
- 4. (Currently Amended) The neurostimulating lead, as in Claim 3, wherein the body member comprises is polyurethane and has an outer diameter of about 2 French and an internal diameter of about 0.012 inch.
- 5. (Currently Amended) The neurostimulating lead, as in Claim 4, wherein the at least one conductor has said conductors have a substantially rectangular cross-section, about 0.004 inch wide by about 0.002 inch high.
- 6. (Currently Amended) The neurostimulating lead, as in Claim 5, wherein the at least one conductor comprises metal, and wherein said conductors are a metal, wherein the metal is selected from the group consisting of stainless steel, MP35N, titanium, tantalum, tungsten, platinum, and or silver.
- 7. (Currently Amended) The neurostimulating lead, as in Claim 3, wherein the at least one conductor comprises turns, with turns of said conductors are longitudinally spaced

ATTORNEY DOCKET NO. ANSI01-00012 U.S. SERIAL NO. 09/500,213 PATENT

from each other, each turn being at an angle between about 10 degrees to about 80 degrees from a longitudinal axis of the body member.

- 8. (Currently Amended) The neurostimulating lead, as in Claim 7, wherein the at least one thin film electrode is electrically connected by the at least one conductive link to the at least one conductor. each of said thin film electrodes spans and is electrically connected by at least one of said links to at least one of the plurality of conductors.
- 9. (Currently Amended) The neurostimulating lead, as in Claim 7 wherein the at least one thin film electrode each of said thin film electrodes spans and is electrically connected by the at least one conductive link said links to more than one turn of the at least one conductor a given one of said plurality of conductors.
- 10. (Canceled)
- 11. (Currently Amended) The neurostimulating lead, as in Claim <u>1</u> 10, wherein the electroplated conductive <u>link comprises</u> links comprise a metal selected from the group consisting of gold, silver, platinum, platinum-iridium and titanium.
- 12. (Canceled)

ATTORNEY DOCKET No. ANSI01-00012 U.S. SERIAL No. 09/500,213 PATENT

13. (Canceled)

14. (Currently Amended) The neurostimulating lead, as in Claim 1, wherein the at

least one thin film electrode includes a first segment and a second segment said electrodes

include first and second electrode segments disposed along a longitudinal dimension of the body

member in overlapped relation, the first segment and the second segment said electrode

segments adapted to be electrically connected to a one of a voltage of positive polarity, a voltage

of negative polarity, and or zero voltage.

15. (Currently Amended) The neurostimulating lead, as in Claim <u>1</u> 10, wherein <u>the</u>

at least one thin film electrode each of said ring electrodes comprises multiple superposed

nanocrystaline metal layers with an innermost layer of a metal selected from the group

consisting of titanium, chromium, nickel and aluminum and having a thickness less than about

5 microns, a layer adjacent the innermost layer of a metal selected from the group consisting

of lead and platinum and having a thickness between 500 angstroms and 50 microns, the

outermost layer of a metal selected from the group consisting of gold, platinum and platinum-

iridium and having a thickness between 500 angstroms and 50 microns, and a layer adjacent the

outermost layer of a metal selected from the group consisting of gold, platinum, platinum-

iridium, silver and copper and having a thickness between 500 angstroms and 50 microns.

Page 6 of 14

16. - 35. (Withdrawn)

- 36. (New) A neurostimulating lead comprising:
 - (a) a body member having a length, an outer surface, a proximal end and a distal end;
 - (b) at least one conductor extending the length of the body member;
- (c) at least one electrode positioned on the outer surface at the distal end of the body member; and
- (d) an electroplated conductive link extending from the at least one conductor to the at least one electrode.
- 37. (New) The neurostimulating lead, as in Claim 36, further comprising a plurality of tunnels extending through a wall of the body member from the at least one conductor to the electrode, each of the plurality of tunnels including an electroplated conductive link for electrically connecting the at least one conductor to the electrode.
- 38. (New) The neurostimulating lead, as in Claim 37, wherein the at least one conductor comprises turns, with each turn being at an angle between about 10 degrees to about 80 degrees from a longitudinal axis of the body member.

- 39. (New) The neurostimulating lead, as in Claim 36, wherein the at least one conductor is embedded within a wall of the body member.
- 40. (New) A neurostimulating lead comprising:
 - (a) a body member having a length, an outer surface, a proximal end and a distal end;
 - (b) at least one conductor extending the length of the body member;
- (c) at least one electrode positioned on the outer surface at the distal end of the body member; and
- (d) an electroplated conductive link formed during an electroplating process and extending from the at least one conductor to the at least one electrode, the electroplated conductive link comprising a metal selected from the group consisting of gold, silver, platinum, platinum-iridium and titanium.
- 41. (New) The neurostimulating lead, as in Claim 40, wherein the at least one conductor is embedded within a wall of the body member and the electroplated conductive link extends through a tunnel from the at least one conductor to the electrode.
- 42. (New) The neurostimulating lead, as in Claim 41, wherein a plurality of electroplated conductive links extend from the at least one conductor to the electrode.